## **Data Sources**

Macroeconomic conditions: The economic indicators used to monitor macroeconomic changes in the U.S. economy are derived from Federal sources. Measures of inflation, including the consumer and producer prices indexes, productivity, employment cost, and employment and unemployment data are developed by the U.S. Department of Labor's Bureau of Labor Statistics (BLS). Energy prices are from the Energy Information Administration, U.S. Department of Energy. National income and product account information on capital investment, gross domestic product, and net exports is produced by the Bureau of Economic Analysis (BEA), U.S. Department of Commerce. Information relating to monetary policy including changes in interest rates and foreign exchange rates, and data on industrial production are furnished by the Federal Reserve Board.

Employment data: Data on metro and nonmetro employment and unemployment reported in this issue come from two sources. The monthly Current Population Survey (CPS), conducted by the Bureau of the Census for the Bureau of Labor Statistics, U.S. Department of Labor, provides detailed information on the labor force, employment, unemployment, and demographic characteristics of the metro and nonmetro population. The CPS derives estimates based on interviews of a national sample of about 47,000 households that are representative of the U.S. civilian noninstitutional population 16 years of age and over. Labor force information is based on respondents' activity during 1 week each month. Among the data products of the CPS are the monthly files, the earnings microdata files, and the March Annual Demographic Supplement (known as the March CPS). See appendix on CPS redesign for more information on the CPS.

BLS county-level employment data, the Local Area Unemployment Statistics (LAUS), are taken from unemployment insurance claims and State surveys of establishment payrolls which are then benchmarked to State totals from the CPS. The BLS data series provides monthly estimates of labor force, employment, and unemployment for individual counties.

Each of these data sets has its advantages and disadvantages. The CPS furnishes detailed employment, unemployment, and demographic data for metro and nonmetro portions of the Nation. The LAUS provides less detailed employment data than the CPS, but offers very current employment and unemployment information at the county level. While these data sources are likely to provide different estimates of employment conditions at any point in time, they generally indicate similar trends.

**Earnings data**: The data for average and median weekly earnings, and usual weekly hours worked are drawn from the outgoing rotation of respondents in the monthly CPS, about one-quarter of the total sample. These respondents are asked about the usual earnings on their sole or primary job. The CPS earnings microdata file, referred to as the earnings file, consists of all records from the monthly quarter-samples of CPS households that were subject to having these questions on hours worked and earnings asked during the year. The 1996 data file contained information on almost 430,000 persons. Data are available for all wage and salary workers in both the public and private sectors.

Income and poverty data: The household income, personal income, and poverty data reported in this issue were calculated from the March Annual Demographic Supplement, known as the March CPS. Every year, the March CPS includes supplemental questions on sources and amounts of money received during the previous calendar year. Consequently, income information in the March CPS refers to the previous year. Estimates from the March CPS are published by the Bureau of the Census in the Consumer Income P-60 series. Information on family size and income is used to estimate the number of families and individuals in poverty based on official guidelines issued by the Office of Management and Budget. Demographic data are available to examine the distribution of income and the characteristics of the poverty populations in metro and nonmetro areas.

**Migration data**: Migration data reported in the Earnings and Income section are from the Internal Revenue Service. The Internal Revenue Service compiles annual, county-level data by matching current year tax returns with those from the previous year and comparing addresses. If a county or residence is different in the previous year, members of that

family are considered migrants. If the county is the same, they are considered nonmigrants. The number of exemptions claimed on the return serves as a proxy for the number of migrants in that family. Most people file their returns during early to mid-April, so the data here refer to flows from April of 1 year to April of the next.

**Population and immigration data**: Estimates of population change, net migration, and natural increase reported in the article on population growth are from the Bureau of the Census county population estimates issued annually. Population estimates are based on various data sources. Births and deaths are based on vital statistics records. Migration estimates are derived as a residual by subtracting natural population increase from actual increases. Estimates include net gain from other counties as well as the institutional population. Estimates of the elderly population and the immigrant population are from the March CPS.

**Health status data**: Some of the data for the article on the elderly are from the National Health Interview Survey (NHIS), a continuing nationwide sample survey in which data are collected through personal household interviews. Information is obtained on personal and demographic characteristics, illnesses, injuries, impairments, chronic conditions, utilization of health resources, and other health topics. The household questionnaire is reviewed each year, with special health topics being added or deleted. For most health topics, data are collected over an entire calendar year.

**Birth data**: Information about the distribution of births by mother's age, race, marital status, and place of residence was obtained from the 1970, 1980, 1990, and 1994 Natality Detail Files prepared by the U.S. National Center for Health Statistics. Each file contains most of the information reported on official birth certificates, including mother's county of residence. Additional information about the female population needed to calculate marital and nonmarital birth rates was obtained from the 1990-94 Estimates of the Population of Counties (EPC) file prepared by the Bureau of the Census, and the March 1994 CPS. The EPC file provided information about the total number of women aged 15-44 in each county in July 1994. The March 1994 CPS provided estimates of the proportion of currently married females aged 15-44 in metropolitan and nonmetropolitan areas. The March 1994 CPS classification of metropolitan and nonmetropolitan areas was based on the 1983 Office of Management and Budget (OMB) metropolitan definition. Consequently, all other information about births and females aged 15-44 was tabulated by the 1983 OMB definition for consistency.

**Housing data**: Housing data are from the American Housing Survey conducted by the Bureau of the Census for the U.S. Department of Housing and Urban Development. The American Housing Survey is a longitudinal survey designed to provide detailed information on housing structure, use, and plumbing characteristics, equipment and fuel use, housing and neighborhood quality, financial characteristics, and household attributes of current occupants. The national sample is based on about 55,000 units selected for interview in 1995. Data are weighted to reflect the U.S. population. Data were collected annually from 1973 to 1981 as the Annual Housing Survey and every other year since 1981 as the American Housing Survey.

**Farm labor data**: Information on the characteristics and earnings of hired farmworkers are from the CPS earnings microdata file. The data for average and median weekly earnings, and usual weekly hours worked are drawn from the outgoing rotation of respondents in the monthly CPS, about one-quarter of the total sample. These respondents are asked about the usual earnings on their sole or primary job. The CPS earnings microdata file consists of all records from the monthly quarter-samples of CPS households that were subject to having these questions on hours worked and earnings asked during the year. The 1996 data file contained information on almost 430,000 persons.

Farm operator household income and net worth data: Farm operator household income and net worth data are from the Farm Costs and Returns Survey (FCRS). The FCRS is a probability-based survey in which each respondent represents a number of farms of similar size and type. Thus, sample data can be expanded using appropriate

weights to represent all farms in the contiguous United States. The FCRS is conducted annually by the Economic Research Service and the National Agricultural Statistics Service in all States except Alaska and Hawaii. For the 1995 calendar year, usable data were collected from nearly 8,800 farms and ranches.

Estimates based on an expanded sample differ from what would have occurred if a complete enumeration had been taken. However, the relative standard error (RSE), a measure of sampling variability, is available from survey results. The RSE is the standard error of the estimate expressed as a percentage of the estimate. According to the guidelines for use of the FCRS, any estimate with an RSE greater than 25 percent must be identified.

The standard error of the estimate can also be used to evaluate the statistical differences between groups. The article on Farm Household Income and Wealth emphasizes differences between groups only when estimates were significantly different at the 95-percent level.

The data reported in this issue of *Rural Conditions and Trends* are for nonmetropolitan (nonmetro) and metropolitan (metro) areas, but we use the terms "rural" and "urban" interchangeably with "nonmetro" and "metro," the original and more accurate terms used in the data sources.

**Adjusted unemployment rate**: The total unemployed, plus all marginally attached workers (including discouraged workers), plus total employed part-time for economic reasons workers, as a percent of the civilian labor force plus all marginally attached workers. The adjusted unemployment rate is a more comprehensive way to measure labor market distress than the unemployment rate. This measure corresponds with the Bureau of Labor Statistics's U-6, from the 1994 revised alternative measures of labor underutilization.

**Civilian labor force**: Noninstitutional civilians age 16 or older who are either employed or unemployed. Individuals who are neither employed nor unemployed are out of the labor force.

**Family**: Family is defined as two or more people residing together who are related by birth, marriage, or adoption.

**Farm**: Any place from which \$1,000 or more worth of agricultural products is sold or normally would be sold in a year. Noncommercial farms have sales less than \$50,000. Commercial farms have sales of \$50,000 or more.

**Farm operator**: The person who runs the farm, making the day-to-day decisions. Information is collected for only one operator per farm. For farms with more than one operator, data are collected only for the primary operator.

**Farm operator households**: The households of primary operators of farms organized as individual operations, partnerships, and family corporations. These farms are closely held (legally controlled) by their operator and the operator's household. Farm operator households exclude households associated with farms organized as nonfamily corporations or cooperatives, as well as households where the operator is a hired manager. Household members include all persons dependent on the household for financial support, whether they live in the household or not. Students away at school, for example, are counted as household members if they are dependents.

Farm operator household income: The total income of farm operator households includes income from both farm and off-farm sources. Farm income to the household includes net cash farm income less depreciation, adjusted for the share received by the primary operator household in the case of multiple-household farms. Farm income to the operator household also includes any net income received by the household from other farm businesses, plus any wages or salaries paid to the operator and household members by the farm businesse. Off-farm income consists of the income that all farm household members received from other sources, including wages and salaries, the net income of any nonfarm businesses, interest and dividends, and all other cash off-farm income.

## **Definitions**

Farm operator household income is defined to be consistent with the definition of household income used by the Bureau of the Census in the Current Population Survey.

**Farm operator household net worth**: The difference between the operator household's assets and liabilities. It is calculated as the sum of the operator household's farm net worth and nonfarm net worth. If the net worth of the farm is shared with other households (such as the households of shareholders in a family corporation), only the operator household's share is included.

**Gross domestic product (GDP)**: The value of final output produced by people, government, and firms in the United States, whether they are U.S. or foreign citizens, or U.S.- or foreign-owned firms. Output of U.S. citizens or firms located outside the United States is not included. This statistic is reported quarterly but is revised in each of the 2 months following the initial release.

**Hired farmworkers**: Persons aged 15 and older who do farm work for cash wages or salary, including persons who manage farms for employers on a paid basis, supervisors of farmworkers, and general farm and nursery workers.

**Household**: Households consist of all persons living in a housing unit. A house, an apartment, or a single room is considered a housing unit if it is occupied as separate living quarters. To be classified as separate living quarters, the occupants of the housing unit must not live and eat with any other people in the structure.

**Household income**: The sum of the amounts of money received from wages and salaries; nonfarm self-employment income; farm self-employment income; Social Security or railroad retirement; Supplement Security Income; cash public assistance or welfare payments; dividends, interest, or net rental income; veterans payments; unemployment or workers' compensation; private or government employee pensions; alimony or child support; and other periodic payments for all household members.

**Income**: IRS income data in the migration article in the Earnings and Income section, used to measure the effect of migration on county-level per capita income, includes wages, salaries, taxable interest, pensions and annuities, unemployment compensation, and other income reported to the IRS. It does not include in-kind payments.

**Inflation rate**: The percentage change in a measure of the average price level. The two measures of the average price level used in this issue are the Consumer Price Index for All Urban Consumers (CPI-U) and the implicit Personal Consumption Expenditures Deflator.

**Labor force participation rate**: The proportion of the population that is in the labor force.

## **Major Farming Regions:**

*Northeast:* Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont.

Lake States: Michigan, Minnesota, Wisconsin.

Corn Belt: Illinois, Indiana, Iowa, Missouri, Ohio.

Northern Plains: Kansas, Nebraska, North Dakota, South Dakota.

Appalachian: Kentucky, North Carolina, Tennessee, Virginia, West Virginia.

Southeast: Alabama, Florida, Georgia, South Carolina.

Delta: Arkansas, Louisiana, Mississippi.

Southern Plains: Oklahoma, Texas.

Mountain: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming.

Pacific: California, Oregon, Washington.

**Mean income versus median income**: The Earnings and Income articles use *median* income as a summary measure of income in rural areas. The Farm Household Income and Wealth article uses *means* to examine operator household income and net worth. Both the mean and the median are measures of central tendency.

The Earnings and Income article on household income in this issue of *RCaT* uses median household income to discuss the level of income in rural areas. The median household income is the income of the household at the center of the income ranking (i.e., at the 50th percentile). Thus, the median represents the income of the average household. Likewise, median personal income is the income of the person right in the middle of the ranking of all personal incomes by size. The median has the advantage of not being influenced by the very high incomes of a small minority of households or persons.

The Farm Household Income and Wealth article uses the arithmetic mean (more simply called the mean) rather than the median to examine farm operator household income and net worth. In the article, means are referred to as averages, which is common in non-technical writing. Mean household income is simply the sum of the income received by households divided by the number of households. The mean is used in order to analyze the composition of income and net worth as well as their levels. For operator households, mean off-farm income (or net worth) plus mean farm income (or net worth) equals mean total household income (or net worth). Thus, one can calculate the share of mean household income (or net worth) from off-farm sources. In contrast, medians are not additive.

**Metro areas**: Metropolitan Statistical Areas (MSA's), as defined by the Office of Management and Budget, include core counties containing a city of 50,000 or more people or have an urbanized area of 50,000 or more and total area population of at least 100,000. Additional contiguous counties are included in the MSA if they are economically integrated with the core county or counties. For most data sources, these designations are based on population and commuting data from the 1990 Census of Population. The Current Population Survey data through 1993 categorizes counties as metro and non-metro based on population and commuting data from the 1980 census. Throughout this publication, "urban" and "metro" have been used interchangeably to refer to people and places within MSA's.

**Natural amenities index**: Natural amenities are measured using an index created at the Economic Research Service, combining measures of climate, topography, and the presence of bodies of water. The index of climate attractiveness is defined using January temperature, number of days with sun in January, July temperature (expressed as a residual when regressed against January temperature), and July humidity. Topography is defined as the difference between an index of mountainous or rugged terrain and average elevation. The presence of bodies of water is measured using the percentage of land area covered by water.

**Nonfarm earnings**: The sum of wage and salary income, other labor income, such as privately administered pension and profit-sharing plans, and current production income of nonfarm sole proprietorships, partnerships, and tax-exempt cooperatives.

**Nonmetro areas**: Counties outside metro area boundaries. Throughout this publication, rural and nonmetro are used interchangeably to refer to people and places outside of MSA's.

**Personal income**: The sum of money income to a person from all sources, from which money income is regularly received, reported as having been received in the previous calendar year. The sources of money income are: wages and salary; net income from the operation of a business or farm; dividends, interest, royalties, and net rental income; alimony and child support payments received from outside the household; pensions; and transfer payments. Specifically excluded under this definition are windfalls such as a lump sum payment of an inheritance even though in money; capital gains or losses; income in kind; and all within household gifts or transfers whether in cash or kind.

**Poverty**: A person is in poverty if his or her family's money income is below the official poverty threshold appropriate for that size and type of family. Different thresholds exist for elderly and nonelderly unrelated individuals, for two-person families with and without elderly heads, and for different family sizes by number of children. For example, the poverty threshold for a family of four with two children was \$15,455 in 1995. The thresholds are adjusted for inflation annually using the Consumer Price Index.

**Region**: Most articles in this issue use the Census region delineation. The States in each region are as follows:

*Northeast*—Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

*Midwest*—Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin.

South—Alabama, Arkansas, Delaware, District of Columbia, Florida, Georgia, Kentucky, Louisiana, Maryland, Mississippi, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, Virginia, and West Virginia.

West—Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming.

**Rural-urban continuum codes**: Classification system developed by ERS to group counties by the size of their urban population and their adjacency to larger areas. (See Margaret A. Butler and Calvin L. Beale, *Rural-Urban Continuum Codes for Metro and Nonmetro Counties, 1993*, AGES 9425, U.S. Department of Agriculture, Economic Research Service, Sept. 1994).

Metro counties—

Central counties of metro areas of 1 million population or more

Fringe counties of metro areas of 1 million population or more

Counties in metro areas of 250,000 to 1 million population

Counties in metro areas of fewer than 250,000 population

Nonmetro counties-

Urban population of 20,000 or more, adjacent to a metro area

Urban population of 20,000 or more, not adjacent to a metro area

Urban population of 2,500 to 19,999, adjacent to a metro area

Urban population of 2,500 to 19,999, not adjacent to a metro area

Completely rural or less than 2,500 urban population, adjacent to a metro area

Completely rural or less than 2,500 urban population, not adjacent to a metro area

Nonmetro adjacent counties—

Nonmetro counties physically adjacent to one or more metro areas and having at least 2 percent of the employment labor force in the county commuting to the central metro county.

**Transfer payments**: Cash or goods that people and nonprofit institutions receive from government and some businesses (for example, liability payments) for which no work is currently performed. Receipt of transfer payments, however, may reflect work performed in the past. For example, elderly people receive Social Security now because they worked earlier in their lives and paid taxes to fund the program. Government transfers to individuals are grouped into the following categories: retirement and disability programs, medical programs, income maintenance programs, unemployment insurance, and veterans' programs. Note that payments from farm commodity programs are received as part of farmers' gross cash income from current farming activities. They are not transfer payments.

**Typology Codes**: Classification system developed and periodically revised by ERS to group counties by economic and policy-relevant characteristics. The typology codes used in this issue are those described in Peggy J. Cook and Karen L. Mizer, *The Revised ERS County Typology: An Overview*, RDRR 89, U.S. Department of Agriculture, Economic Research Service, Dec. 1994.

**Economic types** (mutually exclusive, a county may fall into only one economic type):

Farming dependent—Farming contributed a weighted annual average of 20 percent or more of total labor and proprietors' income over the 3 years from 1987 to 1989.

Mining dependent—Mining contributed a weighted annual average of 15 percent or more of total labor and proprietors' income over the 3 years from 1987 to 1989.

Manufacturing dependent—Manufacturing contributed a weighted annual average of 30 percent or more of total labor and proprietors' income over the 3 years from 1987 to 1989.

Government dependent—Federal, State, and local government activities contributed a weighted annual average of 25 percent or more of total labor and proprietors' income over the 3 years from 1987 to 1989.

Services dependent—Service activities (private and personal services, agricultural services, wholesale and retail trade, finance, insurance, real estate, transportation, and public utilities) contributed a weighted annual average of 50 percent or more of total labor and proprietor income over the 3 years from 1987 to 1989.

Nonspecialized—Counties not classified as a specialized economic type over the 3 years from 1987 to 1989.

**Policy types** (overlapping, a county may fall into any number of these types and one economic type):

Retirement-destination—The population aged 60 years and over in 1990 increased by 15 percent or more during 1980-90 through inmovement of people.

Federal lands—Federally owned lands made up 30 percent or more of a county's land area in the year 1987.

Commuting—Workers aged 16 years and over commuting to jobs outside their county of residence were 40 percent or more of all the county's workers in 1990.

*Persistent-poverty*—Persons with poverty-level income in the preceding year were 20 percent or more of total population in each of 4 years: 1960, 1970, 1980, 1990.

*Transfers-dependent*—Income from transfer payments contributed a weighted annual average of 25 percent or more of total personal income over the 3 years from 1987 to 1989.

**Unemployment rate**: The number of unemployed people 16 years and older as a percentage of the civilian labor force age 16 years and older.